

Nutrition and the Eye

ECPs Embrace Nutraceuticals



BY MARIAN ZBORAJ / CONTRIBUTING EDITOR

It's estimated that more than 43 million Americans will develop age-related eye diseases by 2020, according to The American Academy of Ophthalmology. Currently, approximately 1.7 million Americans have some form of age-related macular degeneration, according to the National Eye Institute, and approximately 100,000 are blind from the disease. Of the 8,000 Baby Boomers who turn 60 every day, more than half will develop an age-related eye disease, according to Lighthouse International.

To help address this trend, the eyecare industry is setting its sights on preventive measures—one of which in particular is nutrition's role and the use of nutraceuticals in preserving vision, which is quickly gaining in popularity.

Many organizations, like the National Eye Institute, are recommending that the public “eat right to protect sight” with nutrient-rich foods, including dark leafy greens such as spinach, kale or collard greens, and fish like salmon, trout or halibut. These foods deliver important eye healthy nutrients—lutein, ze-

xanthin and omega-3s, for example.

Unfortunately, it's widely known that most Americans do not follow a healthy, nutritious diet. The typical American diet is too high in saturated fat, sodium, and sugar and too low in fruits, vegetables, whole grains, calcium and fiber, according to the Center for Science in the Public Interest. This is where eye nutraceuticals can help as they can be supplemented into one's diet to fill the nutritional gap and protect vision. “Nutraceuticals” is a term used to describe specially formulated supplements and functional foods and beverages that support specific health conditions.

In addition to the Baby Boomers who are interested in maintaining their health and preventing or reversing eye disease, the Millennial generation is also generating interest in this small but growing niche in eyecare. Even larger in number than the Baby Boomers, Millennials, with their interest toward living healthy lifestyles, are also driving growth in this fledgling category that is quickly gaining traction.

According to The Food Institute, Millennials take a more self-reliant approach to health care.

“Efforts toward healthier living by Millennials are evidenced across a range of rituals,” according to The Food Institute, whose recent SymphonyIRI study on Millennial Shoppers determined that 22 percent of 18- to 34-year-old consumers eat five servings of fruit/vegetables per day, 30 percent take multivitamin/vitamin supplements and 34 percent eat whole grain foods.

In response to this multi-generational demand to address preventive health and eyecare with nutrition, a cadre of passionate eyecare professionals is seeking ways to help their patients through diet and nutritional supplements. The fact that many ECPs are taking an interest is evidenced by the growth of the Ocular Nutrition Society (ONS).

According to the ONS, “The demand for vision services is expected to flood the health care system by 2015 due to age-related eye disease and the diabetes epidemic. As the Baby Boomer generation is aging, research shows that the number of people in the U.S. with impaired vision, including blindness, could increase by at least 60 percent over the next

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Eye Health Supplements Among Fastest Growing Categories

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three decades. Therefore, disease prevention, including lifestyle modification, attention to dietary intake and micronutrient supplementation must become more of a focus of primary vision care.”

In response to this growing demand among ECPs and their patients, suppliers of nutritional supplements are now actively targeting optometric offices.

All of this is supported by the National Eye Institute’s 2001 landmark Age-Related Eye Disease Study (AREDS) that found nutritional supplementation can reduce the risk of developing advanced age-related macular degeneration (AMD). In 2006, NEI began a second study, AREDS2, to improve the original AREDS formulation. The result is a combination of vitamin C (500 mg.), vitamin E (400 IU), lutein (10 mg.), zeaxanthin (2 mg.), zinc (80 mg.) and copper (2 mg.) that has become the standard of care for many optometrists in reducing the risk of AMD.

A Practice Building Opportunity

The strong correlation between good nutrition and healthy vision is not being ignored by consumers as products geared toward eye health are growing in



“Patients tend to be compliant when their ECP hands them the bottle and tells them exactly how much to take.”—Monique Wellise,

Education and Professional Sales Manager, Nordic Naturals

popularity. According to Packaged Facts’ “Nutritional Supplements in the U.S., 6th Edition,” eye health has become one of the fastest growing categories within condition-specific supplements, with sales of eye health supplements in the multi-outlet channel up 9 percent in 2012 and up a further 10.5 percent in 2013. In fact, eye health supplements, along with joint health, were the largest condition-specific supplement categories in 2013, comprising almost one-



“When left on their own, many patients become confused about which product to select.”—Pamela Damsen, Marketing Consultant,

ScienceBased Health

third of all condition-specific supplement sales (see pie chart, “Multi-Outlet Condition-Specific Supplement Sales, 2013,” page 52).

With sales of eye nutraceuticals continually outpacing market growth, offering guidance on nutrition is a pertinent eyecare service and a way for ECPs to enhance the value they offer patients.

It then stands to reason that eyecare professionals are seeing the wisdom and opportunity from merely recommending nutraceuticals in the retail store to offering this value added service in their own practices. “Eyecare providers are missing the boat if they do not offer these products to their patients,” said John Wiley, vice president of sales of Macular Health, based in Gardendale, Ala. “After an eye doctor recommends a product, patients are usually inundated

with choices at the retail store, which can be overwhelming. All too often, they grow frustrated and buy something that may not be what the doctor actually recommended, or worse, they walk out of the store with nothing at all.”

Pamela Damsen, marketing consultant for Houston-based ScienceBased Health, agrees, noting that there can be hundreds of products on the retail shelf and thousands of products to sort through online.

“When left on their own, many patients become confused about which product to select,” she said. “A specific product recommendation by the practitioner can be helpful, but the product recommended may not be available or may be difficult to find.”

Adding these products in the office is not only convenient for patients; it’s also easier for doctors to ensure patient compliance. Monique Wellise, the education and professional sales manager at Nordic Naturals, said, “Patients tend to be compliant when their ECP hands them the bottle and tells them exactly how much to take each day.” Without specific guidelines from the ECP, patients will likely buy something of lesser quality and with levels of nutrients that are simply not effective.

Bringing the sale of nutritional supplements into the practice not only ensures that patients will get the quality they require but also presents a revenue-generating opportunity for the ECP. According to New Hope Natural Media, U.S. sales of vision condition supplements during 2012 totaled \$412 million, and 2013 sales are estimated to increase to \$437 million, according to the most recently available statistics.

“If the doctor does not provide these products to their patients, the only entities generating any revenue are the retail chains and the companies making the supplements,” noted Wiley. “We want to put that revenue into the hands of the ECPs—where it belongs.”

Jeffrey Anshel, OD, FAAO, ONS president, gave “a few thousand dollars” as a “decent ballpark” fig-

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ure for the amount of money a practice can generate per year by adding supplements.

The Management & Business Academy estimates that increasing revenues by selling only an additional \$10 in nutraceuticals per complete eye exam (based on an average of 1.1 complete eye exams per OD hour) could add \$22,000 per year to a practice's revenue.

According to Laurie Capogna, OD, author of two books on "Eyefoods," (see "Feeding Your Eyes," page 53) if an ECP retails a three-month supply of supplements to three patients per day, it could lead to \$60 per day in extra profit. This translates to \$300 per week or \$15,000 per year. If a patient returns to the office to purchase another three-month supply, this has potential to grow to a \$30,000 extra profit per year.

In order to encourage future supplement purchas-



"Patients are much more receptive to the idea of lifestyle and nutrition's impact on improving health."—Kimberly Reed, OD, Educational Institution Liaison, Ocular Nutrition Society

es, Capogna suggests offering some sort of loyalty card. Once patients purchase a year's supply, ECPs can offer patients a discount or gift card. "Once you start to promote nutrition to your patients, you will see your relationships with them grow, and this will ultimately lead to better patient care and practice growth," said Capogna.

Sam R. Silverblatt, OD, practicing in Shreveport, La., has generated increased revenue from \$500 to \$1,000 per month by prescribing Juice Plus+, a supplement that includes juice powder concentrates from 25 different fruits, vegetables and grains, according to a June 2014 article in *Review of Optometric Business*.

There are lots of factors that contribute to the amount of business ECPs can generate from adding supplements to their practice, including size and



"Eyecare providers are missing the boat if they do not offer these products to their patients."—John Wiley, VP Sales, Macular Health

number of offices, geography and number of patients. According to MedOp Health, it has practitioners making anywhere from \$1,000 to over \$30,000 per year on its MaxiVision supplements.

Eye Docs Focus on Nutrition

More eye doctors are getting involved in educating their patients on the benefits of nutritional supplements for eye health. Here are a few who have done so successfully.

and more of these principles as the science has expanded."

Since introducing nutrition years ago into her practice, Reed has noticed a change in patients' acceptance. "Patients were originally skeptical of the whole notion," she said. "But now, more patients come into the office partially educated—having already read an article on how lutein can protect their vision, for example. They are asking important questions and are much more receptive to the idea of lifestyle and nutrition's impact on improving health."

Aleksandra Wianecka, OD, who practices at Vision for Life in Babylon, N.Y., has been recommending nutritional supplements for about eight years. "I believe you are what you eat, and unfortunately our food supply is depleted from vitamins and minerals, so we need to supplement what we eat," she said. "Macular degeneration comes from nutritional deficiencies in the eye. Therefore it's easy for me to talk to patients and get them to believe in it. I have turned some patients into health advocates," she said.

According to Stuart Richer, OD, PhD, FAAO, who practices at Captain James A. Lovell Federal Health Care Center in Chicago, Ill., he has been practicing what is now known as integrative eyecare (including nutrition/nutritional supplements) for the last 30 years.

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"Macular degeneration comes from nutritional deficiencies in the eye."

—Aleksandra Wianecka, OD, Vision for Life in Babylon, N.Y.



The Link Between Nutrients and Vision

Further propelling interest in the burgeoning nutraceuticals category are studies that have determined that healthy eating augmented with nutritional supplements can not only help prevent age-related eye disease but in some cases may reduce its progression, according to the Ocular Nutrition Society (ONS).

One of the more prominent clinical trials that has proven a link between nutrition and eye health is the National Eye Institute's (NEI) 2001 landmark Age-Related Eye Disease Study (AREDS) that found nutritional supplementation can reduce the risk of developing advanced age-related macular degeneration (AMD). The original AREDS formulation contained vitamin C, vitamin E, beta-carotene, zinc and copper. Those who took the formulation were 25 percent less likely to progress to advanced AMD.

In 2006, NEI began a second study, AREDS2, to improve the original AREDS formulation. Researchers substituted lutein and zeaxanthin for beta-carotene, which was associated with an increased risk of lung cancer in smokers. AREDS2 concluded that formulation of the following ingredients were beneficial for ocular health: vitamin C (500 mg.), vitamin E (400 IU), lutein (10 mg.), zeaxanthin (2 mg.), zinc (80 mg.) and copper (2 mg.). This formulation has become the standard of care for many optometrists in reducing the risk of AMD.

Jeffrey Anshel, OD, FAAO, president of the Ocular Nutrition Society, pointed out that these nutrients aren't only beneficial for age-related conditions. For example, lutein shouldn't be limited to individuals over age 50. "It has been found that lutein is actually in breast milk, which kids stop getting prior to two years old. Thus, it's important to continue to add lutein throughout childhood and into adulthood, and not wait until some signs of eye disease appear," he said.

Zeaxanthin and lutein are actually both primary macular pigments found in the fovea that act as "internal sunglasses," filtering harmful high-energy blue

wavelengths of light and helping protect and maintain healthy cells. Without proper nutrition, macular pigment levels can decrease. Lutein and zeaxanthin supplementation can help increase macular pigment levels, protecting against certain eye diseases.

A recent study also found that zeaxanthin supplementation can improve visual processing speed. The study from the University of Georgia Vision Sciences laboratory measured the impact of high levels of dietary zeaxanthin (20 mg. and above) on processing speed, or the speed at which a person's eyes and brain communicate to identify, process and respond to stimuli. Participants experienced statistically significant improvements in reaction time.

ble for protecting the eyes from light, heat and age-related damage. It is critical to the development, function, and maintenance of the light-receiving cells found in the eye."

Further, the anti-inflammatory omega fatty acid GLA has been shown to benefit dry eye in several randomized, controlled clinical trials, said Pamela Damsen, marketing consultant to ScienceBased Health. The benefit of GLA has been found for a wide range of dry eye-related causes, including: Sjögren's syndrome, tear-deficient dry eye, contact lens wear, post-PRK, meibomian gland dysfunction, and most recently for post-menopausal women.

Quick View of Eye-Friendly Nutrients

According to the American Optometric Association, researchers have linked eye-friendly nutrients such as lutein, zeaxanthin, vitamin C, vitamin E and zinc to reducing the risk of certain eye diseases. Besides obtaining these nutrients in supplements, here's a quick look at where they can be obtained in foods.

Nutrient	Foods
Lutein and Zeaxanthin	Green leafy vegetables, as well as other foods, such as eggs.
Vitamin C	Fruits and vegetables, including oranges, grapefruit, strawberries, papaya, green peppers and tomatoes.
Vitamin E	Nuts, fortified cereals and sweet potatoes.
Essential Fatty Acids	Fatty fish like tuna, salmon, or herring, whole grain foods, chicken and eggs.
Zinc	Extra-lean red meat, poultry, liver, shellfish, milk, baked beans and whole grains.

In addition, omega-3 fatty acids from fish oil have also been shown to be essential to the healthy structure and function of ocular tissue. Unfortunately, as Monique Wellise, the education and professional sales manager at Nordic Naturals pointed out, an estimated 91 percent of Americans are deficient in omega-3 fats. "If a patient is deficient in omega-3, they are lacking nutritional support for optimal eye health," she said. "DHA is the omega-3 fat responsi-

Supplement Safety Concerns

On the whole, with rare exceptions, nutritional supplements have proven in published studies to be safe. But as with any product that is ingested, there are precautions one should take. For example, nutritional supplements meant to slow the progression of age-related macular degeneration may actually accelerate the disease in people with certain genotypes,

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according to research recently published in the *Journal of the American Academy of Ophthalmology*.

It is also important for ECPs to partner with a reputable manufacturer, as quality can widely vary. WebMD also advises consumers to read the labels. For example, avoid supplements containing fillers, ingredients used to bulk up products so they “look like more.” These include wheat, corn, and dairy products, which could cause digestive or allergic problems in patients. Also, if fish oil is listed as a source of omega-3 essential fatty acids, the label should state that it has been produced in a manner that eliminates contaminants, particularly mercury.

AllAboutVision.com recommends following these guidelines when choosing eye supplements: check for the expiration date and make sure the seal has not

been broken, check the serving size, and remember that the best eye supplements contain quality ingredients that have high bioavailability making them easily absorbed by the body.

Other factors to bear in mind include the fact that taking vitamins/minerals in mega doses can cause toxicity; “natural” does not always mean “safe”—plants, after all, can produce some powerful poisons; and even if dietary supplements are deemed safe, they can still interfere with the function of other medications someone might be taking.

Similar to other products ECPs consider offering to patients, they need to do their due diligence in learning about any possible adverse effects in the nutritional supplement. ■

Nutrition Science at AAO

The Ocular Nutrition Society will continue its tradition of assembling top researchers in nutrition science to present at its 13th educational symposium, to be held Nov. 11, 2014, at the Denver Convention Center in conjunction with the American Academy of Ophthalmology meeting. Scientists from several prestigious institutions will present the latest science, ranging from dietary influences on ocular disorders to the role of carotenoids in ocular function to recent ocular research studies.

Improve Care and Practice Growth with Nutraceuticals

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“Many of our World War II vets are doing quite well maintaining their vision at age 90 and beyond,” he noted. “Prescription of lutein and zeaxanthin, through diet or supplementation, can improve the visual function of most people in a short period of time, whether they suffer from AMD or not. This includes safer driving from a visual standpoint.”

For other ECPs looking to integrate nutrition in their practice, Reed advises to first be educated about appropriate and safe supplement practices. “Pick a company that has a reputation of building its products based on science with high-quality ingredients because there is such wide variability in supplements,” she said. “If people walk in discount stores and pick the cheapest one, they will get what they pay for because the better quality ingredients cost more. Independent content verification of supplements costs more for companies, justifying the price of the product.”



“Lutein and zeaxanthin, through diet or supplementation, can improve the visual function of most people.” —Stuart Richer, OD, PhD, FAAO, Captain James A. Lovell Federal Health Care Center, Chicago, Ill.

Wianecka believes the only way ECPs can successfully incorporate supplements into their practice is by taking these products themselves. “I take supplements, I recommend them to my children, and family (and even give them to my dog!), therefore it makes it credible and honest to recommend to my patients.” She also reminds other ECPs to have staff onboard to carry the “importance of nutrition in eye health” message.

Richer cautions other optometrists entering this area to move slowly and methodically in order to become an expert. “It will take constant study and

commitment,” he said. “Aim to know the biochemistry and purpose of every supplement on the store shelf before committing yourself to stocking actual products.” As its research committee chair, Richer recommends the best way to learn about eye nutrition is to join the Ocular Nutrition Society, which educates ECPs on its role in systemic and ocular health. ■

Marian Zboraj is Editor, Food Quality & Safety (formerly Food Quality), John Wiley & Sons, Inc.



What Eye Health Supplements Are Available?

The following are some examples of the high-quality eye nutraceuticals that are available for ECPs to provide for their patients.

MedOp Health Inc. offers MaxiVision, a complete line of AREDS2 (Age-Related Eye Disease Study)-based eye and whole body nutritional supplements (see “The Link Between Nutrients and Vision,” page 49), according to information provided by Brenda Gaulin, director of marketing, MedOp Health. The line includes the MaxiVision Ocular Formula, which has two times the lutein and zeaxanthin found to be effective in AREDS2.

It also features a proprietary blend of other key nutrients, including bilberry extract and taurine, which has shown promise in studies to support eye health. The MaxiVision Eye Formula is an AREDS2 base level formula with 25 mg. of zinc. And the MaxiVision Macula Formula is the AREDS base formula with 80 mg. of zinc. The company also offers a MaxiVision Whole Body and Eye & Body Formula, which combine the Eye Formula with a multivitamin.



Macular Health's recently introduced MacuStrip dissolves on the tongue for easier swallowing and a higher rate of absorption.

MedOp is also branching out into the nutritional beverage market, according to Gaulin. Currently, the company provides MaxiVision Whole Body Formula, a single daily dose drink mix, but it has plans to release an Ocular Formula version in January 2015. Beverage delivery approaches like these have shown

to be ideal for those patients who have trouble with or dislike swallowing pills.

Macular Health offers an AREDS2 formulation, a Premier formula, an Antioxidant Only formulation, and two different Zinc Only formulations, according to information provided by John Wiley, vice president of sales, Macular Health. The Antioxidant Only and Zinc Only versions are genotype-directed nutraceuticals for macular degeneration and have been engineered for doctors who utilize genetic testing.

The AREDS2 and Premier formulas include vitamins C and E along with zinc, copper, lutein and zeaxanthin to help slow the progression of age-related macular degeneration (AMD). Macular Health's dry eye formula contains three distinct types of oils and a diabetic eye health product that promotes retinal health and helps reduce the risk of retinal damage.

The company recently introduced its MacuStrip Premier product, offering a different delivery method, according to Wiley. Macular Health took its Premier formula and placed these ingredients on an easily dissolving and a palette-pleasing strip. An Oral Thin Film (OTF) is ideal for those patients who have difficulties swallowing pills. OTF also has a high nutrition absorption rating since it bypasses the gastrointestinal tract and transports the essential ingredients by way of the blood stream.

ScienceBased Health has a range of nutritional supplements to address various eye health concerns, including: glaucoma (Optic Nerve Formula) and diabetic retinopathy (Diavis), as well as multinutrients (OcularProtect and OcularEssentials) and an omega-3 supplement (OmegaAdvance) to help preserve visual and whole body health, according to information provided by Pamela Damsen, marketing consultant, ScienceBased Health. The company's HydroEye formulation has been shown to improve dry eye symptoms, lower levels of inflammatory biomarkers, and maintain corneal smoothness with its proprietary blend of omega fatty acids (GLA, EPA, and DHA), antioxidants, and other nutrients that support a

healthy tear film and soothe the ocular surface.

The company's MacularProtect Complete contains the ingredients studied in AREDS and includes a complete and balanced multi-nutrient, according to Damsen. This convenient “all-in-one approach” ensures patients receive other nutrients to protect visual and whole body health without “doubling up” on certain nutrients. MacularProtect Complete also contains other nutritional ingredients that research has found to promote visual and whole body health, such as the trio of B vitamins (folate, B6, and B12).

Additionally, ScienceBased Health offers an orange-flavored beverage form of MacularProtect Complete AREDS2, according to Damsen.

Nordic Naturals' ProOmega (liquid and soft gels) and ProDHA Eye (soft gels) are its top selling essential fatty acid products among ECPs. Practitioners with a dry eye focus tend to use ProOmega, according to Monique Wellise, education and professional sales manager, Nordic Naturals. This concentrated fish oil delivers higher levels of EPA and DHA than most commercially available products to correct deficiency. Four soft gels deliver 2,200 mg. of combined EPA and DHA, and one teaspoon of the liquid version delivers over 2,500 mg. of EPA and DHA combined.

ECPs with an AMD focus gravitate toward ProDHA Eye, according to Wellise. It is one of the company's synergistic blends that combine concentrated fish oil with targeted nutrients. ProDHA Eye has higher levels of DHA than EPA and delivers 788 mg.



ScienceBased Health's HydroEye formulation has been shown to improve dry eye symptoms, lower levels of inflammatory biomarkers and maintain corneal smoothness.

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Tips on Integrating Nutraceuticals Into the Business

Those ECPs who are successful in integrating nutraceuticals into their practice have done so because they did their due diligence in partnering with a nutritional provider.

Not all forms of eye nutrients are created equal. Legitimate providers need to back up quality claims about their manufacturing processes and ingredients. Products should be processed in facilities that adhere to Good Manufacturing Practices, which are FDA-enforced guidelines that assure dietary supplements have the identity, strength, composition, quality and purity that appear on their labels.

ECPs are strongly encouraged to choose an evidence-based nutraceutical provider that can provide scientific monographs for its formulations. “Many patients nowadays are savvy about nutrition and want to understand the evidence and scientific backing,” ScienceBased Health’s Pamela Damsen said. “Patients also get a lot of information and misinformation on the internet, so having scientific facts to back up product recommendations is important.”

Providers should also offer necessary training support, such as on-site staff training sessions for practices. Enlisting staff support is essential in ensuring that the various facets of an ECP’s nutritional program work. For example, a point person should be designated to handle the logistics of pricing, obtaining the products and other aspects of getting a patient started.

Help patients make the connection between nutri-

tion and eye health by displaying books, magazines, posters and brochures about nutrition.

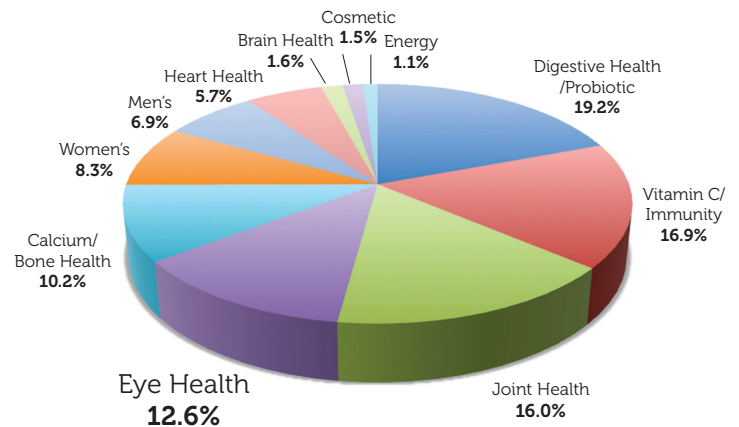
The American Optometric Association has an entire section on its marketplace page (www.aoa.org/marketplace) devoted to nutrition resources.

Z e a V i s i o n ’ s EyePromise blog (www.eyepromise.com/doctors/blog/) features tips and research about ocular nutrition. The company also offers a free e-book about how nutrition affects eye health (<http://explore.eyepromise.com/eyepromise-celebrates-healthy-aging-month>).

Laurie Capogna, OD, co-author, *Eyefoods: A Food Plan for Healthy Eyes*, suggests creating a retail display for supplements and nutrition books. “All you need is one or two shelves of space to create an eye-catching display. Group supplements with other items that promote ocular wellness such as sunglasses, photochromic lenses and lenses that filter blue light,” she said.

ECPs should believe in the products. First-hand experience is an effective way to endorse the rec-

Multi-Outlet, Condition-Specific Supplement Sales, 2013



Eye health supplements comprised 12.6 percent of condition-specific supplements sold in 2013.

Source: Packaged Facts’ “Nutritional Supplements in the U.S., 6th Edition.”

ommended products.

ECPs need to be prepared to justify why the products they recommend are more expensive than those in discount stores. Patients can get distracted by price, choosing a lower cost product believed to be comparable to the recommended product. By partnering with a nutritional provider that offers a high value/price ratio on its products, ECPs can provide a valid explanation: a higher price means higher quality ingredients for a higher efficacy than those lower quality, lower priced products in the drugstore. ■



Feeding Your Eyes: ODs Write a Healthy Eyes Food Plan

After learning about the power of nutrition and lifestyle in the prevention of vision loss and chronic ocular disease, Laurie Capogna, OD, and Barbara Pelletier, OD, were motivated to write their first book, *Eyefoods: A Food Plan for Healthy Eyes*, to help provide other ECPs with a clear nutrition and lifestyle plan for their patients.

“Some of the most important eye nutrients for ocular health and function are the carotenoids, lutein and zeaxanthin, and omega-3 fatty acids (DHA and EPA),” noted Capogna. “Other important nutrients are vitamin C, vitamin E, beta-carotene and zinc. Even though we no longer prescribe ocular vitamins with beta-carotene, after the results of AREDS (which found an increased risk of lung cancer in smokers taking beta-carotene supplementation), beta-carotene from food is safe, so we still recommend food sources of beta-carotene.”

There are many foods that contain high amounts of these eye nutrients. “One of the most important eyefood categories are leafy green vegetables, with kale taking the top spot,” said Capogna. “Other eyefoods include cold-water fish such as wild salmon, sardines, mackerel and rainbow trout, eggs and orange peppers, which are high in zeaxanthin.”

Here are some quick tips ECPs can share with patients:

eyefoods
A FOOD PLAN FOR HEALTHY EYES



Laurie Capogna, OD, and Barbara Pelletier, OD, wrote Eyefoods to provide ECPs with a clear nutrition and lifestyle plan for their patients.

- **Leafy Greens:** A handful a day helps keep AMD away.
- **Orange Peppers:** Eat two peppers per week, two ways, raw and cooked.
- **Cold Water Fish:** Eat four servings of fish per week, small is safe as smaller fish tend to have less contamination.

ECPs shouldn't forget to lead by example. It's a good idea to stock the office kitchen with nuts and seeds, kiwi, citrus fruit, orange peppers, and hummus for eye healthy snacks throughout the workday. Offering eye-friendly food samples to patients is a good idea as well to help promote talking to patients about being equipped to make better

eyefoods®
A Tasty Guide to Nutrition and Eye Health for kids



After writing the first Eyefoods book, the authors wrote Eyefoods for Kids to educate the next generation about the importance of maintaining their ocular health.

everyday food choices at home.

One problem with prevention efforts toward eye diseases is that education usually starts well into adulthood. Most people don't get this information in their younger years while they can still take preventive measures. As a result, Capogna and Pelletier have written their second book *Eyefoods for Kids: A Tasty Guide to Nutrition and Eye Health* to help educate the next generation about the importance of maintaining their ocular health.

“As our patients' primary eyecare providers, we have the power to motivate them to make better everyday choices that will lead them to a lifetime of healthier eyes,” said Capogna. ■



Supplements Target Wide Range of Eye Health Conditions

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of DHA, 190 mg. of EPA, 20 mg. of FloraGLO lutein and 4 mg. of zeaxanthin in two soft gels.

EyePromise is **ZeaVision's** line of ocular supplements. Designed for patients at risk of developing AMD and those that have a low Macular Pigment Optical Density (MPOD) score, EyePromise Restore replicates the natural 2:1 ratio of zeaxanthin to lutein in a healthy fovea, according to Lisa Bertrand, digital marketing manager, ZeaVision. There's also EyePromise AREDS2 Plus, which combines the ingredients studied in the AREDS2 with a multivitamin.

EyePromise Zeaxanthin + Lutein and EyePromise Zeaxanthin macular formulas are intended to increase MPOD and protect photoreceptors. It does not contain animal byproducts, making it ideal for vegans and patients with fish oil allergies.

With grape seed extract, benfotiamine and coenzyme Q-10, ZeaVision's EyePromise DVS is a retinal health formula that supports blood vessel health and is



ZeaVision's EyePromise line of ocular supplements features formulations for those with or at risk of developing specific eye conditions.

suited for patients at risk of developing macular edema or retinal blood vessel degeneration. It's also intended for those needing to increase their MPOD score.

EyePromise EZ Tears is a dry eye and contact lens comfort formula with nine anti-inflammatory ingredients to soothe dry eye from the inside with the help of omega-3s and vitamin D3 along with a proprietary blend of green tea leaf, evening primrose oil and tocotrienols/tocopherols. It can also be used to relieve dryness due to pre- and post-surgery medications or issues caused by environmental irritants.

Earlier this month, ZeaVision Holdings, Inc. received an equity investment from DSM Venturing, the corporate venture arm of global life sciences and material sciences company, Royal DSM. "ZeaVision has made a significant contribution to expand research and scientific understanding of the role of nutrition in eye health," said Will Black, vice president of marketing, DSM Nutritional Products.

Tozal, a prescription supplement from **Focus Laboratories, Inc.**, is indicated for the distinct nutritional requirements of individuals diagnosed with, or at risk for, AMD, Dry Eye Syndrome and Meibomian Gland Dysfunction, according to the company's website. It has all the high potency antioxidants and zinc important to eye health, plus lutein, zeaxanthin and omega-3 fatty acids.

With a name that comes from the mirror image of the traditional symbol for prescription, **xR** defines itself as a "natural prescription restoring what your body is missing." The Cleveland-based company

provides the means for doctors to easily incorporate therapeutic genetic testing with nutrition and supplement services into their practices. For more, see "Genetics Role in Nutrition" on www.VisionMonday.com.

A number of other ocular supplements are also available.

Bausch + Lomb's OcuVite line is sold at the consumer retail level, and the company's PreserVision offers AREDS or AREDS 2 formulations. **Alcon** also offers AREDS formulations in its ICaps line, which also includes a multivitamin and a lutein and omega-3 and a lutein and zeaxanthin formulation.

Biosyntx formulations are designed to address the micronutrient needs of the dry eye, cataract, macular degeneration, glaucoma and diabetic retinopathy patient. **EyeScience** offers supplements geared toward macular health, dry eye and computer eye strain.

A division of **Fortifeye Nutraceuticals**, Fortifeye Vitamins offers a wide range of supplements, including Macular Defense, AREDS 2 and others. **Lipotriad** vitamins are designed to help slow down the progression of AMD. **VisiVite** ocular nutrition formulas for ocular nutrition are designed for AREDS, AREDS 2, dry eyes and athletic vision. ■



Nordic Naturals ProDHA Eye is one of the company's synergistic blends that combine concentrated fish oil with targeted nutrients.